PRECIPITATION.

The average precipitation for California for June with departures from the normal is as follows:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	Inches.	*Inches.*		*Inches.*	*Inches.*
1897	0.46	+0.15	1905	0.07	− 0.24
1898	.25	− .06	1906	1.05	+ .74
1899	.57	+ .26	1907	1.02	+ .71
1900	.19	− .12	1908	.17	− .14
1901	.01	− .30	1909	.19	− .12
1902	.10	− .20	1910	.05	− .26
1903	.07	− .24	1911	.15	− .16
1904	.04	− .27	1912	.49	+ .18

The greatest monthly precipitation was 2.80 inches at Edgewood, or 1.50 inches more than the heaviest monthly amount reported during June, 1911. At 63 stations there was no rain during the month.

SNOWFALL IN THE MOUNTAINS.

The snowfall was light during June. Only patches of snow remained on ground at high levels after the 7th and the snow cover may be said to have disappeared at the end of the first week. On the 23d there was a fall of about 1 inch, but this disappeared within 24 hours.

SUNSHINE.

The following table gives the total hours of sunshine and percentages of the possible:

Stations.	Hours.	Percentage of possible.	Stations.	Hours.	Percentage of possible.
Eureka	164	36	Sacramento	329	74
Fresno	403	92	San Diego	245	57
Los Angeles	291	68	San Francisco	301	68
Mount Tamalpais	273	62	San Jose	351	80
Red Bluff	328	73	San Luis Obispo	299	69

There was less sunshine during the current June than during June last year and much less than during June, 1910.

NOTES ON THE RIVERS OF THE SACRAMENTO AND LOWER SAN JOAQUIN WATERSHEDS DURING JUNE, 1912.

By N. R. Taylor, Local Forecaster.

Sacramento watershed.—The average stages of all streams in this watershed were much below those usually maintained during the month of June. In no case, however, were the rivers as low as during the corresponding month in 1910.

The upper Sacramento River remained practically stationary, but from Colusa to Walnut Grove the river fell steadily during the entire month, the ranges between the stages of the first and last dates being 7.1, 8.2, and 7.8 feet, respectively, at Colusa, Knights Landing, and Sacramento City.

Some rain fell during the month in the drainage basins of all streams, but with the exception of the American River at Folsom, which rose slightly over 2 feet during the 24 hours ending at 7 a. m. of the 13th, the rainfall had little effect on stream flow.

Lower San Joaquin watershed.—The rivers of this watershed averaged from 1 foot to over 3 feet below the normal for the month. There was a notable absence of the usual June freshets.

Melting snow slightly increased the run-off of the tributaries of the San Joaquin during the first few days of the month and resulted in a noticeable swell in this river during the latter part of the first decade, otherwise the effect of snow water was not apparent. By the middle of the month a general fall was in progress throughout the lower San Joaquin drainage basin.

Conditions now indicate that the extreme low-water stages will be reached much earlier than usual in this watershed.

NOTES ON THE STREAMS OF THE UPPER SAN JOAQUIN WATERSHED.

By W. E. Bonnett, Local Forecaster.

A somewhat better stage of water was maintained in the streams of the upper San Joaquin watershed during June than the low stages of May indicated as being probable. Of the six years' record, the stages for May, 1912, were the lowest with the one exception of May, 1908, while the June stages this year are higher than those of 1908 and 1910 also. However, the excess over the mean stages of 1910 is not considerable.

The mean of the daily gage readings at Merced Falls for June was 1.7 feet as compared with a six-year average of 2.1 feet, the daily stages ranging from 3.1 feet on the 3d and 4th to 0.7 foot on the 30th. At Friant on the San Joaquin the mean daily stage was 2.6 feet as compared with a six-year average of 4 feet. The extreme stages of 5 feet and 0.7 foot occurred on the same dates as at Merced Falls. At Firebaugh the mean monthly stage was 5.9 feet as compared with an average of 8 feet, 2.4 feet in 1908 and 4.8 feet in 1910. In the Kings River at Piedra the daily stages ranged from 12.2 feet on the 3d and 4th to 6.3 feet on the last day of the month, with a mean stage of 9.1 feet.

WEATHER AT POINT REYES LIGHT, CAL., DURING JUNE, 1912.

By James Jones, Observer.

The meteorological feature of the month was the record-breaking rain storm of June 23 and 24. A total of 1.49 inches fell during this storm, and 1.27 inches fell within a 24-hour period. Not only is this the heaviest 24-hour rainfall ever recorded here in June, but it is also the heaviest in any month since February, 1909.

PRESERVING MAMME CAPRIFIGS FROM FROST.

By G. P. Rixford.

The following article is an extract from an exhaustive paper on Recent investigations in fig culture and caprification, read by Mr. Rixford at the Fruit Growers' Convention, held at Santa Barbara, Cal., May, 1912. Only that portion relating to frost is given.

Dependence on the Blastophaga.—Everybody knows that the Smyrna fig industry is absolutely dependent on the blastophaga which carries the pollen grains from the stamens of the profichi caprifig to the pistillate flowers of the Smyrna fig. The preservation of the insect through the winter is therefore of paramount importance.

The severe frosts of the past winter proved very disastrous to the mamme crop, as well as to thousands of young trees throughout almost the whole of California and Arizona. First, abnormally low temperatures in November, prematurely defoliated the trees and left the figs exposed unusually early; then scanty rainfall during the fall and early winter reduced the vitality of the trees and was a further contributory